



Bonner County **EDUCATIONAL GAP** *analysis*

March 2010

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BONNER COUNTY EDUCATIONAL GAP ANALYSIS

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About EMSI

EMSI provides economic data, analysis, and consulting services to workforce, education, and economic development professionals throughout the nation. Since 1995, EMSI has delivered high-quality, cost-effective services that promote economic growth, institutional change, and intelligent use of human, physical, and financial resources.

EMSI gathers and harmonizes data from nearly 90 state and federal sources, creating a comprehensive and current database that is unsurpassed for its breadth and detail. Industry, workforce, and demographic data are available at the state, county, and ZIP code levels. By combining dozens of data sources, EMSI can fill gaps in individual sources, such as those due to suppressions and missing proprietors, yielding a composite database that exploits the strengths of each source. The EMSI database is updated quarterly with the latest information from the Current Employment Statistics database. The employment data contained in this report were released in June 2009.

EMSI uses many components in the creation of its data. At the end of this document, there is an appendix titled “About the Data,” which contains a more detailed account of EMSI’s data production process and a comprehensive list of EMSI’s resources.

Key Terms & Concepts

Economic Base: Economic base analysis is built upon the national Input-Output table, or “A Matrix,” which is published by the Bureau of Economic Analysis (BEA). EMSI combines the industry “use” and “make” matrices with other economic data published by the BEA to arrive at regional transaction estimates.

EPW (Earnings Per Worker): Total industry earnings (earnings of all businesses in the industry) divided by the number of jobs in the industry. This is not equivalent to the industry’s “average worker wages.” For worker wages it is more accurate to look at occupational wage figures.

Location Quotient (LQ): The relative concentration of the industry, occupation, or demographic in the region—in other words, a measure of the region’s specialization in the selected component. LQ is defined as the percent share of the component in the regional economy divided by the percent share of the same component in the national economy. High LQ scores tend to indicate specialties or strengths that are unique to the region.

Executive Summary

There is a twofold purpose to this study. First, it seeks to analyze available data to determine how well-suited Bonner County is for a Communiversity. Second, it seeks to provide guidance regarding the types of programs that could be offered at the Communiversity if it were established. EMSI looked at data related to four community components that we believe are critical to the success of a Communiversity: education, arts and culture, community service, and business. Bonner County has a diverse economy, with contributions from services, manufacturing and tourism. It also has an exceedingly high proprietorship rate, a higher-than-average proportion of individuals working in arts and culture and entrepreneurial occupations, and one of the strongest non-profit sectors within the state. The data indicate what is intuitively known by the Communiversity stakeholders—Bonner County is well-prepared for a Communiversity due to the strength of its community assets

EMSI's educational gap analysis has yielded some interesting data to serve as a starting point regarding the academic plans of the Communiversity. We discovered that within occupations that typically require two to four years of education, some of the programs most in need of more graduates are General Office Occupations, Business & Administration, and Administrative Assistants. This provides a solid opportunity for the Sandpoint Communiversity to help increase regional output in these programs by offering introductory courses in business, bookkeeping, and economics, which could lead to a degree at either the Communiversity campus or at other regional schools. There are also strong opportunities outside of the business field in programs such as Machine Tool Technology and Carpentry.

Among those occupations that are most in need of trained workers and are not currently being addressed by regional postsecondary institutions, there is a diverse group of occupations. For instance, certain high-wage/high-growth occupations—first-line supervisors/managers of construction trades and extraction workers; electricians; engineering technicians, except drafters, all other; advertising sales agents; and shipping, receiving and traffic clerks—display strong growth and earnings potential in industries that have shown growth in Bonner County in recent

years. In addition to these high-wage/high-growth occupations, there is a wealth of opportunities among occupations that have slightly slower growth rates or offer slightly lower wages. Unaddressed occupations in this category include truck drivers, heavy and tractor-trailer; teachers assistants; child care workers; and nursing aides, orderlies, and attendants.

With the abundance of resources and opportunities available in Bonner County, a Communiversity has the potential to be very successful. With the help of the data and analysis contained in this report, the authors hope Communiversity stakeholders are able to identify the greatest needs in the region and provide solutions that benefit the regional economy.

the Communiversity & Data

At its core, the Communiversity concept is relatively simple. A Communiversity is a place for community members of all ages to learn and contribute their knowledge and resources. Apart from meeting this core requirement, the educational programs and community services that are offered through a Communiversity depend wholly on the needs and desires of the community. Therefore, the programs and services offered through the Sandpoint Communiversity will be decided through the ingenuity and motivation of local stakeholders, and their ability to gather support and resources to serve the needs of the community. The assets of the community in terms of experience, talent and commitment are what will determine whether these desires are converted into actions.

In the report EMSI has provided data which, as best as possible, reflects the assets of Sandpoint and the greater Bonner County area. The goal is that our exploration of this data will reveal how well-suited Bonner County is for a Communiversity and how easily it will be able to garner and leverage resources in the area. There are some limitations to providing data on community assets that come from high-level aggregated data sources. Economic data typically measure job growth, earnings, etc. Factors such as community passion, volunteerism, and human connectedness—in short, the things that make a community tick—will not be uncovered by mining macro-level data systems. Therefore, this report should not be taken as an exhaustive catalogue of the assets of Bonner County, but rather as a first step toward portraying the community's assets in a way that is helpful for community stakeholders and representatives.

Based on EMSI's research into the Communiversity model and our interactions with individuals who have worked in such systems, we see the Communiversity as a group of people who meet at the convergence of several components of a community. The main components include education, business, culture, and community service. Education is composed of teachers, administrators, parents, and any other individuals who are concerned with the further acquisition of knowledge for people of various ages. Business includes the portion of a community engaged in the production of goods or services that increase the well being

of both the community and those who are connected with businesses from the area. Culture includes individuals who either in their work or in their free time contribute to the propagation of arts and cultural institutions. This could be people who produce artistic material (dramatic arts, literature, music, etc.), or those who donate or pay for the existence of such artistic networks. Community service contains the expression of charity in the form of public, private, and non-profit groups that engage in any form of community and personal giving. This could be in a thoroughly organized sense (e.g., a free medical clinic, counseling services, or day care) or on an ad hoc basis (e.g., temporarily established groups for raking leaves, picking up garbage, volunteering for community events).

Each of these community components has different missions, but they also have areas of overlap. The portions of their unique missions that overlap are the areas where a Communiversity can thrive. The Venn Diagram in Figure 1.1 illustrates the relationships between these different community components and a Communiversity.

Figure 1.1: Community Components and the Communiversity



In the first portion of this report we will display all of the available data regarding these different sectors of a community and make suggestions about how their overlapping sections can be employed by the Sandpoint Communiversity. In the second portion of this report we will delve into the question of which programs would best serve the needs of the regional labor market and make the Communiversity a key player in the region.

Economic Overview

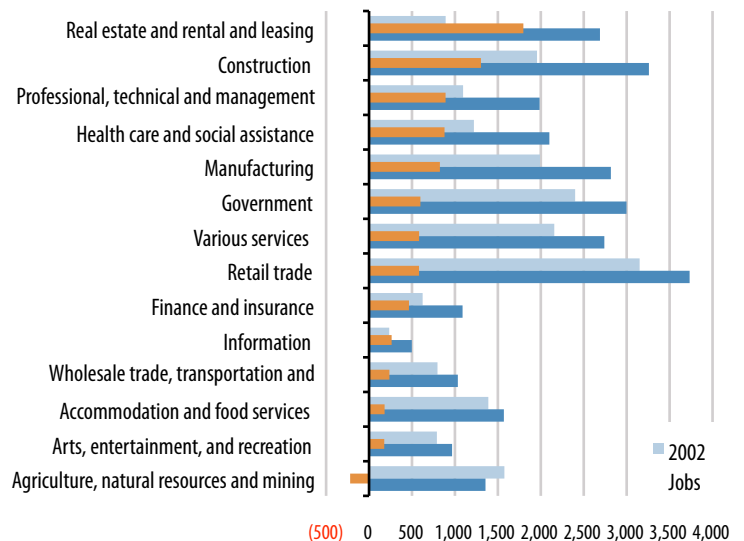
The following information is designed to give the stakeholders of the Sandpoint Community an idea about the existing economy in Bonner County. This includes information about industry sectors and occupational groups, including employment, past employment growth, projected employment growth, earnings estimates, and data that show which portions of the economy are most supportive of the other sectors in the economy.

Industry Overview

The industry overview is intended to provide a long-term view of the growth potential of each of the industry sectors that have some importance in Bonner County. The graph and table below contain information on employment at two points in time, 2002 and 2019. From this information we derive two key data points: job change and percentage job change. To provide a greater level of understanding on each of these industries, several other metrics

are displayed in the table, including location quotient scores (LQ) for 2002 and 2019 employment, the current earnings per worker (EPW) as of 2009, and the national percent change estimate.

Bonner County has a healthy balance of different types of industries. This balance provides a wealth of employment options for individuals in the area, and keeps the region stable in times of economic recession. In 2002, the largest sectors were retail trade, government, and various services. Due to greater amount of growth in certain sectors, the largest employing sectors will shift by 2019. According to projections, the largest sectors in 2019 will be retail trade, construction, and government. The growth in construction and real estate has been tremendous in Bonner County over the past eight years. Though it is hard to tell if these



NAICS Code	Description	2002 Jobs	2019 Jobs	Change	% Change	Current EPW	2002 LQ	2019 LQ	National % Change
53	Real estate and rental and leasing	892	2,689	1,797	201%	\$10,841	1.27	1.75	85%
23	Construction	1,956	3,259	1,303	67%	\$31,798	1.63	2.03	13%
93	Professional, technical and management services	1,095	1,986	891	81%	\$34,093	0.74	0.81	40%
62	Health care and social assistance	1,221	2,100	879	72%	\$34,050	0.63	0.62	49%
31–33	Manufacturing	1,991	2,816	825	41%	\$41,161	1.02	1.54	(20%)
90	Government	2,400	2,998	598	25%	\$45,588	0.85	0.80	13%
94	Various services	2,157	2,740	583	27%	\$23,386	0.80	0.68	27%
44–45	Retail trade	3,151	3,733	582	18%	\$32,957	1.41	1.32	8%
52	Finance and insurance	624	1,089	465	75%	\$38,103	0.64	0.73	31%
51	Information	235	498	263	112%	\$31,301	0.51	0.91	0%
91	Wholesale trade, transportation and warehousing	797	1,034	237	30%	\$47,339	0.53	0.51	13%
72	Accommodation and food services	1,389	1,570	181	13%	\$16,215	1.04	0.78	27%
71	Arts, entertainment, and recreation	790	967	177	22%	\$18,878	1.97	1.44	42%
92	Agriculture, natural resources and mining	1,576	1,356	(220)	(14%)	\$27,653	2.84	2.00	4%
		20,274	28,834	8,560	42%	\$31,288			21%

sectors will emerge from the recession with the same momentum that they brought coming into it, they will still provide a great deal of employment opportunities and economic growth—even if they only recover to a fraction of their pre-2008 condition.

Outside of the two largest growing sectors, there are three more sectors that are not as tied to the housing market and are projected to grow at equally substantial rates. Professional, technical and management services; health care and social assistance; and manufacturing are critical to economic progress because they provide critical services to the region and bring in fresh revenue from outside of the region. These sectors pay an average wage that is higher than the 2009 regional average of \$31,000.

Professional, technical, and management services include such detailed industry groups as business services, lawyer’s offices, IT services, engineering offices, and so on. Between 2002 and 2019, EMSI projects an 81% growth in this industry. Growth in this category leads to greater employment for both high-paying professionals—such as lawyers, engineers, designers, etc.—and for the business services staff that supports these industries.

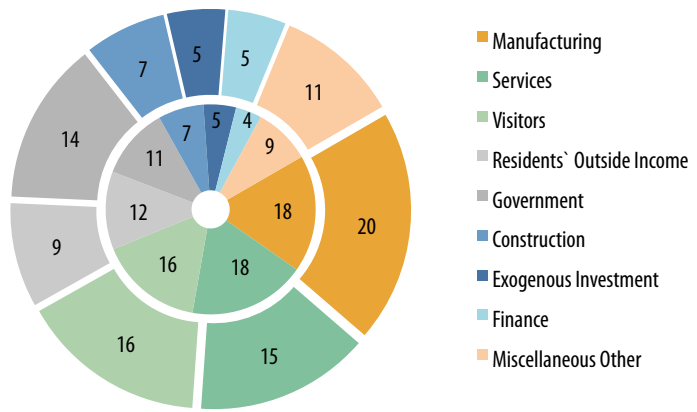
Healthcare and social assistance, which is undergoing well-documented growth across the country, is anticipated to grow by 72%, or near 880 new jobs, over the 17-year time frame. There are a number of solid job opportunities in this sector at the two-year education level, including nurses, medical assistants, and technical workers.

Manufacturing, which perhaps plays an even bigger role in the expansion of the economy than the aforementioned sectors, is anticipated to grow by 41% from 2002 to 2019. The success of Bonner County in industries such as condiment manufacturing and aircraft manufacturing brings in much-needed funds from outside of the county. Manufacturing leads to job opportunities in production and machinery operation and repair, which typically pay higher than the regional average.

Economic Base Information

Economic base analysis uses a mathematical model to determine which groups of industries, or sectors, are most fundamental to a region’s economy. The nature of these industries is determined by whether they bring money into a region or simply circulate existing dollars that are already present in the region. Groups of industries that bring in external dollars are called “basic” while industries that do not are called “non-basic.” Basic industries generally export products and services to non-regional purchasers. Basic industries are important because growth or decline in these areas results in large ripple effects across the economy. EMSI’s model calculates how much of each sector’s jobs and earnings rely on exports. It then uses multiplier effects to determine what level of commerce occurs between basic industries and other non-basic industries in the region. In so doing, the

Sector	Jobs	Earnings (K)	Jobs %	Earnings %
Manufacturing	4,321	\$149,007	18%	20%
Services	4,317	\$110,951	18%	15%
Visitors	3,774	\$119,703	16%	16%
Residents` Outside Income	2,835	\$68,998	12%	9%
Government	2,548	\$100,655	11%	14%
Construction	1,578	\$47,865	7%	7%
Exogenous Investment	1,207	\$34,035	5%	5%
Finance	1,054	\$34,017	4%	5%
Miscellaneous Other	1,886	\$70,696	9%	11%
	21,634	\$665,231		



model arrives at an estimate of how much local commerce can be ultimately attributed to the export of goods and services by each basic industry group.

In the graph and table below all economic activity has been apportioned among eight industry sectors. The donut chart displays the percentage of jobs and the percentage of earnings that are attributable to each industry sector. The outer ring represents percentage of regional earnings accountable to that industry and the inner ring represents percentage of regional jobs accountable to that industry. The table displays the title of the sector, the number and percentage of jobs it creates, and the number and percentage of earnings it creates.

The economic base data for Bonner County reveals the regional economy relies on several different categories for cash flow, with manufacturing, services, visitors, and residents’ outside income* contributing a large portion of the region’s jobs and earnings.

* The residents’ outside income category includes labor and non-labor income that residents accrue from outside the region. Common types of income in this category include the income of individuals who telecommute or out-commute, and individuals’ dividends, interest, rent, and transfer payments. Transfer payments often make up a large share of this figure. Transfers include governmental payments for health, welfare, and unemployment.

As mentioned in the previous section, manufacturing plays a larger role in the success of this region than it would appear looking strictly at employment by industry. The influx of new revenue provided by the manufacturing sector and its subsequent ripple effects are ultimately responsible for 4,300 jobs (18% of regional jobs) and \$149 million in earnings (20% of regional earnings). Services also play a notable role in the Bonner County economy, providing about 4,300 jobs (18% of jobs) and \$111 million in annual earnings (15% of regional income). The difference in percentage contribution to total jobs and earnings in these two categories indicates that manufacturing income leads to the production of jobs that pay a higher-than-average wage, whereas jobs affiliated with service industries pay a lower-than-average wage.

The contribution of visitors also plays a key role in Bonner County's economy, sustaining about 3,700 jobs (16% of regional jobs) and \$119 million in earnings (16% of regional earnings). This is a significant impact considering that most workers in tourist-based industries are part-time or seasonal employees who make less than \$20,000 annually. This indicates that although the tourism industry directly provides many low-paying jobs, the effects of these wages extend far beyond just the tourism industry.

Lastly, the 2,835 jobs and \$69 million in earnings attributed to residents' outside income could be due to the revenue of part-time residents, retirees collecting social security and Medicare payments, revenue and benefits of military personnel, and the contributions of out-commuters, among other factors.

Indicator Occupations

The occupations contained in the following five tables are indicative of the employment presence in each of the community components (culture, community service, business, and education) discussed in the introduction. The data in these tables are referred to as indicators because they are not fully representative of the number of individuals in the community who contribute in each of these areas. The occupational data contained here is representative of only the individuals who work and earn money in their role as artists, educators, businesspeople, etc. Therefore, these data do not include whole host of individuals who are not paid for their efforts, including parents, unpaid family members, and volunteers.

The occupational data in these tables include the following elements: employment as of the fourth quarter of 2009; the projected employment through 2014; whether or not the occupation classifies as high-wage, high-growth, or both; the projected number of annual openings; the number of educational programs in the region that feed into that occupation; and the location quotient of that occupation as of 2009. Leading indicators of strong

Summary Table

Occupation Group	2009 Jobs	09-'14 Change	% Change	Annual Openings	Ed Programs	2009 LQ
Cultural	567	109	19%	33	85%	1.26
Community Service	192	55	29%	14	51%	0.59
Entrepreneurial	591	90	15%	33	100%	1.50
Education	848	79	9%	4	73%	0.70

community involvement include employment, the presence of educational programs, and high location quotient scores.

As shown in the summary table, there is a considerable proportion of workers in each of these critical community areas. The occupational groups have between 190 and 840 workers each and are well-represented by the regional educational institutions.

The cultural and entrepreneurial categories, in particular, have very strong LQ scores of 1.26 and 1.50, respectively. For the cultural occupations category, an LQ of 1.26 means that the proportion of jobs in cultural and artistic occupations is 26% higher than the national average for an area with a population size the same as Bonner County. There is also strong growth projected in each of these two categories of 19% and 15%, respectively, while the regional average is 16%.

The occupational groups for community service and education have considerably smaller location quotient scores of 0.59 and 0.70, respectively. In non-mathematical terms, this means that Bonner County has about 70% of the anticipated concentration of education workers based on its population size compared to the rest of the nation. Likewise, community service occupations have about 59% of their expected concentration. This should not be taken as a sign that Bonner County does not place enough emphasis on education and community service, but these low scores are probably indicative of Bonner County's rural setting compared to urban settings, where education and community service jobs are generally more concentrated. Additionally, of all indicator categories, community service occupations are the most difficult to quantify because so much of the sector is typically made up of volunteers. Volunteer organizations, such as the Sandpoint Transitions Initiative and the Community Assistance League, therefore have no representation in this group. Nevertheless, this does point out an important fact: Sandpoint and Bonner County residents may have to work harder to recruit both teachers and individuals who are interested in community service than they would if they were in a more urban setting.

Cultural Occupations

SOC	Title	2009 Jobs	09-'14 Change	% Change	HW	HG	HWHG	Annual Openings	Ed Pro-grams	2009 LQ
27-1029	Designers, all other	16	5	30%				1	1	2.08
27-1027	Set and exhibit designers	13	4	31%				1	1	1.75
27-1022	Fashion designers	15	5	31%				1	1	1.72
25-4031	Library technicians	28	7	23%				3	0	1.72
27-1023	Floral designers	22	2	8%				1	2	1.62
27-1011	Art directors	27	6	22%				2	1	1.52
27-1025	Interior designers	19	5	28%				2	1	1.44
27-3043	Writers and authors	73	16	22%		•		4	0	1.40
27-1012	Craft artists	20	4	21%				1	1	1.39
27-1019	Artists and related workers, all other	20	4	20%				1	1	1.39
27-1013	Fine artists, including painters, sculptors, and illustrators	20	4	21%				1	0	1.34
27-4021	Photographers	139	19	14%				7	1	1.33
27-1014	Multi-media artists and animators	21	5	23%				1	1	1.21
25-4011	Archivists	1	1	44%	•			0	0	1.10
27-2099	Entertainers and performers, sports and related workers, all other	16	2	13%				1	1	1.09
27-2041	Music directors and composers	27	5	20%				2	1	1.03
17-1011	Architects, except landscape and naval	20	2	10%	•			1	1	1.01
27-2011	Actors	14	3	21%				1	0	1.00
27-2032	Choreographers	3	0	15%				0	1	0.96
27-2031	Dancers	3	0	19%				0	0	0.88
27-2042	Musicians and singers	30	6	20%				2	1	0.84
27-2012	Producers and directors	10	2	23%				1	0	0.58
25-4021	Librarians	11	2	15%	•			1	0	0.50
		567	109	19%				33		1.26

Community Service Occupations

SOC	Title	2009 Jobs	09-'14 Change	% Change	HW	HG	HWHG	Annual Openings	Ed Pro-grams	2009 LQ
21-1023	Mental health and substance abuse social workers	31	11	36%	•	•	•	3	0	1.50
21-1014	Mental health counselors	19	6	35%	•			2	1	1.08
21-1011	Substance abuse and behavioral disorder counselors	13	4	32%	•			1	1	0.92
21-1099	Community and social service specialists, all other	15	5	35%	•			1	0	0.88
21-1015	Rehabilitation counselors	14	5	33%				1	1	0.77
11-9151	Social and community service managers	15	5	33%				1	0	0.71
21-1013	Marriage and family therapists	4	1	17%				0	0	0.60
21-1019	Counselors, all other	4	1	17%				0	1	0.57
21-2099	Religious workers, all other	4	0	9%				0	0	0.46
21-2011	Clergy	16	1	8%				0	0	0.43
21-1029	Social workers, all other	5	1	21%				0	1	0.43
21-1021	Child, family, and school social workers	17	5	28%				1	1	0.42
21-2021	Directors, religious activities and education	8	1	8%				0	0	0.41
21-1022	Medical and public health social workers	8	2	24%	•			1	2	0.40
21-1093	Social and human service assistants	16	7	43%				2	1	0.32
21-1091	Health educators	3	1	34%	•			0	0	0.31
21-1092	Probation officers and correctional treatment specialists	3	1	16%	•			0	1	0.25
		192	55	29%				14		0.59

Entrepreneurial Occupations

SOC	Title	2009 Jobs	09-'14 Change	% Change	HW	HG	HWHG	Annual Openings	Ed Pro-grams	2009 LQ
11-1011	Chief executives	254	50	20%	•	•	•	17	1	1.61
11-1021	General and operations managers	337	40	12%	•			16	1	1.43
		591	90	15%				33		1.50

Education Occupations

SOC	Title	2009 Jobs	09-'14 Change	% Change	HW	HG	HWHG	Annual Openings	Ed Pro-grams	2009 LQ
11-9031	Education administrators, preschool and child care center/program	11	1	12%	•			1	1	0.81
11-9032	Education administrators, elementary and secondary school	26	2	7%	•			1	1	0.70
11-9033	Education administrators, postsecondary	7	1	10%	•			0	1	0.36
11-9039	Education administrators, all other	4	0	1%	•			0	1	0.47
21-1012	Educational, vocational, and school counselors	20	3	15%	•			1	1	0.53
21-1091	Health educators	3	1	34%	•			0	0	0.31
21-2021	Directors, religious activities and education	8	1	8%				0	0	0.41
25-2011	Preschool teachers, except special education	35	4	12%				1	0	0.47
25-2012	Kindergarten teachers, except special education	12	0	3%	•			0	0	0.38
25-2021	Elementary school teachers, except special education	204	22	11%	•			9	1	0.88
25-2022	Middle school teachers, except special and vocational education	44	1	3%	•			1	1	0.42
25-2023	Vocational education teachers, middle school	4	(2)	(54%)				0	1	0.69
25-2031	Secondary school teachers, except special and vocational education	176	14	8%	•			8	1	1.13
25-2032	Vocational education teachers, secondary school	5	(1)	(16%)	•			0	1	0.34
25-2041	Special education teachers, preschool, kindergarten, and elementary school	15	2	12%	•			1	1	0.45
25-2042	Special education teachers, middle school	6	0	6%	•			0	1	0.44
25-2043	Special education teachers, secondary school	5	(0)	(3%)	•			0	1	0.35
25-3011	Adult literacy, remedial education, and GED teachers and instructors	14	2	11%				0	2	0.62
25-3021	Self-enrichment education teachers	18	2	11%				1	1	0.41
25-3099	Teachers and instructors, all other	54	6	11%	•			2	1	0.57
25-4011	Archivists	1	1	44%	•			0	0	1.10
25-4013	Museum Technicians and Conservators	0	0	6%	•			0	0	0.00
25-4021	Librarians	11	2	15%	•			1	0	0.50
25-9031	Instructional coordinators	5	1	16%	•			0	1	1.87
25-4031	Library technicians	28	7	23%				3	0	1.72
25-9041	Teacher assistants	127	10	8%	•			4	0	0.63
25-9099	Education, training, and library workers, all other	2	0	8%				0	0	0.10
		848	79	9%				4		0.70

Charitable Giving in Northern Idaho

As previously discussed, community service and volunteerism is one of the most difficult aspects to measure among those that we have identified. Besides paid employment, another area that we can examine to determine a regional commitment to community service is the number of non-profit organizations in the county and their annual revenue and assets. Though this measurement is also imperfect, it provides an indication of how much money

and time county residents are donating to non-profit producing causes. These data come from the National Center for Charitable Statistics, which collects data directly from IRS tax receipts and compiles it on a monthly basis.*

* One of the inaccuracies that should be expected with this approach is that not all local non-profit organizations operate with a regional mission. Some organizations have a national or international mission and therefore could be receiving funds and donations from areas outside of the immediate area. Another problem with this approach is that non-profits have other sources of funding outside of donations, such as grants and fundraising activities.

The following table displays charitable data for Bonner County, along with the other four counties that make up the Panhandle region to provide some comparison of the statistics included. The data columns shown in this table include the number of non-profit organizations in each county; the overall percentage within the state of Idaho; the total reported revenue of those organizations; the total assets of those organizations; and a state location quotient score indicating the quotient of assets within the county compared to the population of the county.

County	# of Orgs	% of State	Total Revenue (millions)	% of State	Total Assets (millions)	% of State	2009 LQ (Assets)
Bonner County	160	4%	\$86.9	2%	\$178.1	2%	0.76
Benewah County	38	1%	\$21.3	1%	\$22.7	0%	0.44
Kootenai County	368	8%	\$98.6	2%	\$276.6	3%	0.35
Boundary County	40	1%	\$6.6	0%	\$7.9	0%	0.13
Shoshone County	68	2%	\$2.9	0%	\$8.0	0%	0.11

Source: National Center for Charitable Statistics, October 2009 data

The table indicates that Bonner County leads the Panhandle region in non-profit assets on a per capita basis. The Panhandle also has the lowest non-profit assets per capita of any of the six geographic regions of the state.* However, Bonner County has the 11th highest rate of the 44 counties in the state. The implication is Bonner County residents are adequately charitable, but the county should not expect to receive the same level of support from surrounding counties, with the exception of Kootenai County.

In terms of donations to charity, Idaho ranks well on a nationwide basis. Idahoans give an average of 1.94% of their income to charity each year, making it the 10th most charitable state in terms of percent of income donated, according to the Fraser Institute's 2008 Generosity Index.† Therefore, Bonner County is strong not just in terms of charitable donation on a statewide scale but also on a nationwide scale.

Proprietorships in Bonner County

The last category that should be quantified to understand the potential success of the Communitiversity is the level of entrepreneurial activity in the region. Entrepreneurship is important

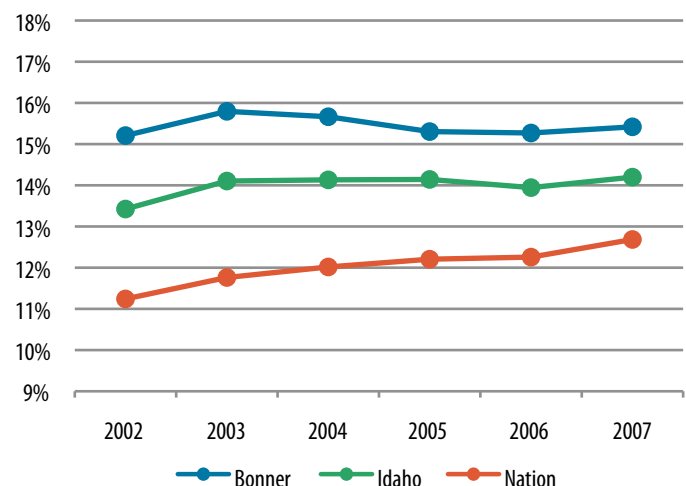
* The regions are the same as those used by the state Departments of Labor and Education. The regions titles are Panhandle, North Central Idaho, Southwestern Idaho, South Central Idaho, East Central Idaho and Southeastern Idaho. Definitions of these regions can be found at the state DOL website.

† http://www.fraserinstitute.org/commerce.web/product_files/Generosity_Index_2008.pdf. The state of Georgia, home to the flagship Featherbone Communitiversity, also scores well on this index, appearing in 2nd place in terms of charitable donations per capita.

for the Communitiversity for two reasons. First, it indicates the amount of initiative and self-motivation that exists among the regional population; having a community with a pioneering spirit is certainly an important aspect of a successful Communitiversity. Second, it indicates the likelihood that businesses will be willing to contribute resources to a business incubator, and the likelihood that new businesses will be created that could use the space.

The following data comes from two main sources: EMSI's complete employment database, and Non-employer statistics (NES) from the U.S. Census Bureau. The purpose of NES is to capture county-level data on the number of proprietors, and their host industry. To determine the percentage of the workforce that is composed of proprietors, EMSI divides the number of proprietors in each industry sector by the number of overall workers in that sector according to EMSI's complete employment. NES defines a proprietor as a person who has no employees and makes over \$1,000 per year. This includes many small business owners, contracted employees, and other types of employees who are legally "self-employed." Since there is no data source that provides estimated entrepreneurship at the county level, we rely on proprietorships as an indicator of entrepreneurship. We make the assumption many businesses start at the individual level and as they gain success, they will eventually hire more workers and build larger businesses.

To provide a more accurate and useful measure of proprietorship, we have included the graph below that excludes a few industries that are heavily dominated by proprietors and are known to be heavily concentrated in Bonner County, including construction, real estate and agriculture. Excluding real estate and construction from the analysis provides a clearer picture of entrepreneurship in the greater business sector, without the heavy influence of part-time workers and contractors. Agriculture is excluded because it is heavily proprietary and does not typically represent new businesses, but rather long-established, family-owned businesses.



Proprietorship Levels by Industry Sector

NAICS	Title	2002	2003	2004	2005	2006	2007
11	Agriculture, forestry, fishing and hunting	15%	17%	17%	16%	17%	18%
21	Mining	6%	5%	5%	6%	5%	3%
22	Utilities	10%	10%	8%	6%	9%	9%
23	Construction	29%	29%	29%	26%	23%	25%
31–33	Manufacturing	7%	7%	6%	5%	5%	5%
42	Wholesale trade	19%	23%	22%	22%	20%	16%
44–45	Retail trade	11%	11%	11%	11%	11%	10%
48–49	Transportation and warehousing	21%	22%	20%	19%	22%	23%
51	Information	13%	15%	15%	17%	14%	14%
52	Finance and insurance	10%	13%	12%	10%	12%	10%
53	Real estate and rental and leasing	34%	33%	31%	31%	29%	28%
54	Professional and technical services	32%	33%	31%	31%	32%	33%
56	Administrative and waste services	30%	30%	31%	31%	30%	34%
61	Educational services	8%	11%	13%	13%	19%	18%
62	Health care and social assistance	16%	17%	16%	17%	16%	16%
71	Arts, entertainment, and recreation	15%	16%	17%	17%	16%	18%
72	Accommodation and food services	4%	4%	4%	4%	4%	3%
81	Other services, except public administration	37%	37%	36%	36%	36%	36%
Total less Construction, Real Estate & Ag.		15%	16%	16%	15%	15%	15%
Total		15.5%	16.1%	16.2%	15.9%	15.7%	16.0%

Proprietorship Levels (minus Construction, Real Estate and Agriculture)

NAICS	2002	2003	2004	2005	2006	2007	2009 LQ (Assets)
Bonner	15.2%	15.8%	15.7%	15.3%	15.3%	15.4%	0.76
Idaho	13.4%	14.1%	14.1%	14.1%	13.9%	14.2%	0.44
Nation	11.2%	11.8%	12.0%	12.2%	12.3%	12.7%	0.35

Bonner County is decidedly more entrepreneurial than both the state of Idaho and the nation. Between 2002 and 2007, Bonner County had an average of 1.5% more proprietors in the workforce per year than the Idaho. The difference between Bonner County and the nation is even greater, with Bonner County averaging 3.4% more proprietors in the workforce per year than the U.S. as a whole. Proprietorship levels appear to be declining somewhat faster in Bonner County than the state and nation over this time period, but given the small sample of available data it is difficult to tell whether this is a temporary alteration or an indicator of a larger change.

At the industry sector level, some of the 2-digit NAICS sectors that have the highest proprietorship levels in Bonner County are other services, except public administration (81); administrative and waste services (56); and professional and technical services (54). High levels of proprietorship in these business-related categories is a good sign that new business development is strong in

Bonner County and that there are many potential candidates for business growth and expansion.

Overall, this brief scan of data on proprietorship data indicates that Bonner County has an unusually strong entrepreneurial spirit. If the Communiversities stakeholders are able to connect with the entrepreneurs in Bonner County, a strong partnership could be developed that is mutually beneficial for the Communiversities and the county's small businesses.

Section Summary

The goal of this section has been to analyze the available data and information in order to reveal how well-suited Bonner County is for a Communiversities. In particular, focus was given to understanding the economic strengths of the region, the presence and concentration of employment in critical community components, the level of interest in non-profit organizations, and the proportion of the workforce that is involved in proprietary ventures. The data indicate what is intuitively known by the Communiversities stakeholders—Bonner County is well-prepared for a Communiversities due to its strength of community assets.

In the establishment of the Communiversities, stakeholders should tap into the entrepreneurial spirit of Bonner County, which has an unusually high proprietorship level (3.4% higher

than the nation between 2002 and 2007) and the charitable instincts of the community since Bonner County has strongest non-profit sector in Idaho's Panhandle region. They could also lean on businesses involved in arts and culture, which are 50% more concentrated in Bonner County than the national average, for the establishment of cultural programs. When building the catalogue of program offerings the Communiversity should also keep in mind which industry sectors produce the most wealth in the region, primarily manufacturing, services, and tourism.

Although the region seems well-suited for the success of a Communiversity, stakeholders should also keep in mind some of the challenges that they may face due to the small population base in the region. Though Bonner County shows an intense interest in education, the level of employment in the education sector is lower than average for a community of its size. Therefore, finding qualified faculty for certain programs could be a challenge at first. Additionally, the low concentration of employment in community service occupations could be a sign that the region may not excel at community-oriented endeavors. This is not an indicator that the Communiversity cannot succeed, but rather that initially the school may have to rely heavily on the efforts of the passionate individuals who have worked hard to establish the school. With time, the overall level of interest in community service may in fact rise as a result of the Communiversity.

Educational Gap Analysis

This section of the report provides data that address how well North Idaho's educational institutions are serving the demands of the labor market, particularly in high-wage, high-growth job opportunities. According to the standard Communiversity model, the course offerings cannot be determined strictly based on labor market needs. To do so would be replicating the model of a community college. The Communiversity is not concerned with just the greatest needs and training for the highest-wage jobs—it is also about providing programs that strengthen the community and provide lifelong learning opportunities. To some extent, the best programs to offer at a Communiversity depend on the desires of the community that it serves. This does not mean that the highest-need programs should be neglected on behalf of those programs that are more highly desired; rather, it should be taken as a sign that the most highly desired programs should not be neglected in favor of the most needed programs.

In this Educational Gap Analysis, EMSI has analyzed occupations that require various levels of education—from middle-skill jobs that require one to two years of postsecondary education to occupations that require significant postgraduate education such as a master's or doctoral degrees. Typically occupations that require higher levels of education are addressed by public universities and colleges, but this does not eliminate the possibility that the Sandpoint Communiversity could be involved in such efforts. Normally, however, regional colleges are concerned more with meeting regional workforce demand that requires two years of training or less. For the sake of clarity, the data in this section have been divided into these two groups to distinguish the average level of education necessary for success. Nonetheless, the Sandpoint Communiversity committee should feel free to look at each of these categories for recommendations.

There are two parts to the Educational Gap Analysis. First, we will examine the programs that currently exist at one or more of the schools in the Panhandle region.* The Sandpoint Communi-

versity should look at these programs as opportunities to either expand educational offerings in areas with high need or to provide introductory level classes that can be transferred to these schools to help increase enrollment. The second part contains an analysis of those occupations that are not currently affiliated with any educational programs in North Idaho. The occupations in this group should be taken to represent those occupations that are in need of attention and have yet to be addressed regionally. Throughout this report, programs that have the largest "gaps" are in the table labeled programs with largest gaps.

A Note on How to Use the Educational Gap Analysis

EMSI uses several data measures in this report. The two most important metrics are annual job openings and 2009 graduates, as they are used to represent occupational demand and workforce supply. By "annual openings," we refer to the number of job openings that EMSI anticipates will be available to workers in the geographic area within a one-year time period. To measure annual openings, EMSI sums the projected numbers of new and replacement jobs. The occupational projections used in this report were developed by EMSI and are the product of the Idaho Department of Labor's employment projections and a number of other federal data sources. By "2009 graduates," we refer to the number of individuals within the geographic area who graduated from programs that train workers to enter the occupational group being analyzed.

Since annual openings and 2009 graduates are used as representative measurements of supply and demand, the difference between the two metrics represents the anticipated training gap or surplus of workers for each high-demand program. The key figure labeled "Gap/Surplus" is a deficit or surplus of trained workers. This shows up as a positive number, equal to the number of graduates that need to be produced in order to fulfill the outstanding demand for trained workers. For instance, if there is a projected annual demand for 50 truck drivers, and last year only 30 people completed truck driving programs in the region, there would be a projected training gap (or lack of) 20 qualified truck drivers in the region in the upcoming year. Put another way, there are 20 jobs available for truck drivers, and local training programs have a good opportunity to meet this demand. A surplus of trained workers shows up as a negative number, indicating that the number of graduates produced in the latest academic year is beyond the needs of the regional economy, and there is no need to train more. To reach a greater level of equilibrium that will meet the needs of the regional economy and the regional workforce, the colleges in that region should reduce their annual output of graduates by that amount. Many of the detailed data tables have been left out of this report in order to keep the report of a reasonable length. These detailed tables are available in the 2009 Bonner County supplementary data file, which is available with permission through the Idaho Department of Labor and EMSI.

* A list of these schools and the programs that they offer is contained in Appendix B

Training Gap Analysis Methodology

In order to produce any type of gap analysis, two basic ingredients are required—an estimate of supply and an estimate of demand. To estimate supply, EMSI has collected educational program completer data from each of Idaho’s public postsecondary educational institutions and utilized the most recent data available from each of the state’s private educational institutions. To estimate demand, EMSI has used its own proprietary labor market data that contain current and projected employment figures for over 750 individual occupational categories. One of the difficulties involved in using these two datasets concurrently is that the supply figures are categorized according to educational programs (CIP codes), and the demand figures are categorized by occupation (SOC codes). To solve this problem, EMSI utilized a program-to-occupation crosswalk (*i.e.*, a list of occupations most closely associated with each program) to determine which programs train individuals to enter each occupational category.*

The occupational projections used in this report are based on EMSI’s best-in-class projection methodology, which uses EMSI’s labor market data combined with the industry projections from all of the US State Labor Market information agencies. The collegiate completer data in this report are from the “Integrated Postsecondary Education Data System” (IPEDS), maintained by the National Center for Education Statistics (NCES). The most recent IPEDS data release was used in this report, which contains results from the 2008 academic year. IPEDS accounts for all colleges and universities that participate in or are applicants for any federal financial assistance program authorized by the Higher Education Act (HEA). The HEA includes most of the well-known federal loans, including Pell Grants, Stafford Loans, etc. All public colleges and universities and a number of private postsecondary schools accept federal assistance loans and therefore are included in this analysis.†

In order to differentiate between occupations that are of common importance and those that are high-priority, we have created individual classifications for occupations that are high-wage (HW) and high-growth (HG) relative to other occupations within the region. These occupations are worthy of closer attention for several reasons. First, as is implied in the title, these occupations pay more and are found in high-growth industries. This provides an easily recognizable benefit to individuals who become successfully employed in these occupations. These occupations also are important for another less obvious reason—as these individuals earn higher-than-average wages, they also typically spend a higher-than-average amount on other local industries. A portion of these workers’ paychecks are spent within the region on other industries, such as personal services, retail, hospitality, entertainment, healthcare and professional services, which allows these other local industries to grow and beget further economic growth.

To determine which occupations classify as HW and HG, EMSI selected certain data thresholds that these occupations needed to meet or exceed. High-growth occupations were required to have projected growth of at least 10 new jobs over the next five years, as well as a percentage growth rate greater than or equal to the median regional growth rate over the next five years. High-wage occupations were required to have median wages greater than or equal to the median regional wage. For the state level analysis, we made adjustments based on the fact that this occupational group contains a much larger pool of workers and a higher educational level than that of the regional groups. The adjustments included increasing the minimum threshold for new job growth from 10 to 50 new jobs, while keeping the percentage growth formula the same as that used in the regional analyses, and increasing the earnings threshold from the 50th to the 75th percentile. Throughout this report, occupations which classify as high-growth have a bullet point in the “HG” column; those that classify as high-wage have a bullet in the “HW” column, and those which are both high-growth and high-wage have a checkmark in the “HWHG” column.

* The US Department of Education has created a program-to-occupation crosswalk, which is commonly used in the educational sector. EMSI uses this same crosswalk as a starting point, but we have made significant changes to this database based on our knowledge of these two database systems and recent changes in the flow of students from college to the workforce.

† Additionally, some schools that do not allow for the use of federal financial aid (such as trade schools, for-profit schools, and religious schools) some-

times report to IPEDS for advertising purposes. A full list of the programs that were considered in this analysis is included in Table A.1 of Appendix A: Program Cross-References

Existing Program Analysis

North Idaho is served by one regional community college, North Idaho College, and extension centers from the University of Idaho, which has educational centers in both Coeur d'Alene and Sandpoint, and Lewis-Clark State College, which has an educational office in Coeur d'Alene. All told, these educational institutions offer 123 different programs, at various levels of education from postsecondary vocational awards to master's degrees. From these programs EMSI has derived 50 distinct program-to-occupation relationships, for which we have produced customized program-to-occupation mappings.* Since only one of these educational centers is located in Bonner County and the

* For details on EMSI's reasons and methodology for consolidating programs see Appendix C: About the Data under the heading, "Cautions for Applying Data from this Report".

others are all located in Kootenai County, EMSI has conducted a standard deduction of 50% to each of these completer numbers. This was done with the assumption that roughly half of all graduates from these programs would be willing and able to commute or relocate from Kootenai County to Bonner County to work. These mappings show the occupation categories that are most commonly associated with each of these program titles, including the pertinent labor market information for each of those occupations. A full account of these program-to-occupation mappings is contained in the supplementary data file.

In this section, the data pertaining to each individual occupational category have been removed. The data in Table 1.1 include program codes and titles; CIP; CIP Title; the college or colleges where the program is offered; the annual openings for the group of occupations associated with each program; the estimated 2009 graduates; the educational gap/surplus; the number of occupations in each group; and the high-wage/high-growth status of each program. Program types that are offered at several colleges in the region are labeled "multiple" in the college(s) column. Programs that have been consolidated with one or more other programs from the same college are annotated with a "+" symbol.

Additionally, the programs have been divided into one of nine different categories: Agriculture & Natural Resources; Arts; Business & Communications; Computers & Information; Education; Healthcare; Maintenance, Transportation, Production & Construction; Services; and Technicians.

Table 1.1: Existing Program Summary

Agriculture & Natural Resources Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HHWG
03.0104	Environmental Sciences	UI CDA	6	2	4	9	•		
03.0601	Wildlife and Wildlands Science and Management	UI CDA	3	1	2	4	•		
26.1307	Conservation Biology	UI CDA	2	1	1	4	•		

Arts Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HHWG
50.0701	Art/Art Studies, General	Mult	6	2	4	4			
50.0409	Graphic Design	Mult	7	4	3	4			
50.0901	Music, General	NIC	3	2	2	2			

Business & Communications Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HHWG
52.0302	Accounting Technology/Technician and Bookkeeping	NIC	55	4	51	17	•	•	•
52.0201	Business Administration and Management, General	Mult	82	37	46	21	•	•	•
52.0408	General Office Occupations and Clerical Services	NIC	46	3	43	19		•	
52.0401	Administrative Assistant and Secretarial Science, General	NIC	26	1	25	4	•		
09.0401	Journalism	NIC	8	2	7	6			
52.0906	Resort Management	NIC	7	1	6	3	•		
52.1001	Human Resources Management/Personnel Admin, General	NIC	5	1	4	10	•	•	•

Computers & Information Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HWHG
11.0202	Computer Programming, Specific Applications	NIC	10	6	4	6	•	•	•
14.0901	Computer Engineering, General	UI CDA	0	1	(0)	1	•		

Education Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HWHG
13.1205	Secondary Education and Teaching	Mult	9	10	(1)	2	•		
13.1001	Special Education and Teaching, General	UI CDA	1	2	(1)	4	•		
13.0301	Curriculum and Instruction	UI CDA	2	4	(2)	3	•		
13.1201	Adult and Continuing Education and Teaching	UI CDA	1	4	(3)	4			
13.1101	Counselor Education/School Counseling and Guidance Services	Mult	1	6	(5)	1	•		
13.0401	Educational Leadership and Administration, General	Mult	2	8	(5)	4	•		
13.1202	Elementary Education and Teaching	Mult	9	19	(10)	1	•		

Healthcare Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HWHG
51.1502	Psychiatric/Mental Health Services Technician	NIC	5	3	3	1	•	•	•
51.0716	Medical Administrative/Executive Assistant and Medical Secretary	NIC	4	3	1	2	•		
51.0805	Pharmacy Technician/Assistant	NIC	4	3	1	1	•	•	•
51.0907	Medical Radiologic Technology/Science	NIC	5	5	(0)	5	•		
51.0708	Medical Transcription/Transcriptionist	Mult	2	3	(1)	2	•		
51.1613	Licensed Practical/Vocational Nurse Training	NIC	0	13	(12)	1	•	•	•
51.1601	Nursing/Registered Nurse	Mult	3	34	(31)	1	•		

Services Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HWHG
12.0503	Culinary Arts/Chef Training	NIC	10	7	3	3			
22.0301	Legal Administrative Assistant/Secretary	NIC	3	1	2	4	•		
22.0302	Legal Assistant/Paralegal	NIC	0	1	(1)	1	•		
43.0107	Criminal Justice/Safety Studies	Mult	6	9	(2)	8	•		
44.0701	Social Work	Mult	9	12	(2)	8	•		

Technician Programs

CIP	CIP Title	College(s)	Annual Openings	Est. 2009 Graduates	Gap/Surplus	# Occs in Group	HW	HG	HWHG
14.1001	Electrical, Electronics and Communications Engineering	UI CDA	1	1	1	2	•		
15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD	NIC	1	3	(2)	1	•		
15.1301	Drafting and Design Technology/Technician, General	NIC	1	3	(2)	2	•		
15.1303	Architectural Drafting and Architectural CAD/CADD	NIC	1	6	(5)	1	•		

Programs with Largest Gaps

In this section, we highlight the programs that currently exist in the state that are serving occupations that have an outstanding demand for workers. In terms of labor market demand, these programs are significantly under-enrolled. This information is contained in Table 2.1 and in Figure 2.1. The estimated shortfall of trained workers for each occupation group is listed in the “Gap/Surplus” column in Table 2.1. This number is also illustrated with the green bar in Figure 2.1. In addition to giving the gap/surplus information, Figure 2.1 displays annual openings and estimated 2009 graduates for each occupational group associated with the listed programs. The green colored gap/surplus bar is the most telling portion of this chart. However, the blue and orange bars to the left of the gap/surplus bars are also important in

that they display the magnitude of demand and supply for each occupational group.

This table includes all programs which have an outstanding demand of 10 or more workers per year. Programs with a score of between 10 and negative nine in the gap/surplus category are considered to be at or near equilibrium and are not addressed.

The largest postsecondary educational gaps exist in the six programs displayed in Table 2.1. Some of these programs have widespread shortage problems and are relatively inexpensive to create and sustain. In these situations, it may be pertinent for the Sandpoint Communiversity to create a stand-alone educational program that awards postsecondary vocational awards. In other cases either the demand is not strong enough or the program is too expensive to replicate at various places within the same geographic region of the state. Among the programs listed in Table 2.1 many seem to hold potential for the establishment of completely new educational programs. For instance, four of the top six programs— General Office Occupations, Business & Administration; Accounting Technology, and Administrative Assistants—are all from the Business & Communications category and share much of the same curriculum. This provides an opportunity for the Sandpoint Communiversity to help increase regional output in these programs by offering introductory courses in business, bookkeeping, and economics, which could lead to a degree at regional schools (e.g., NIC or LCSC

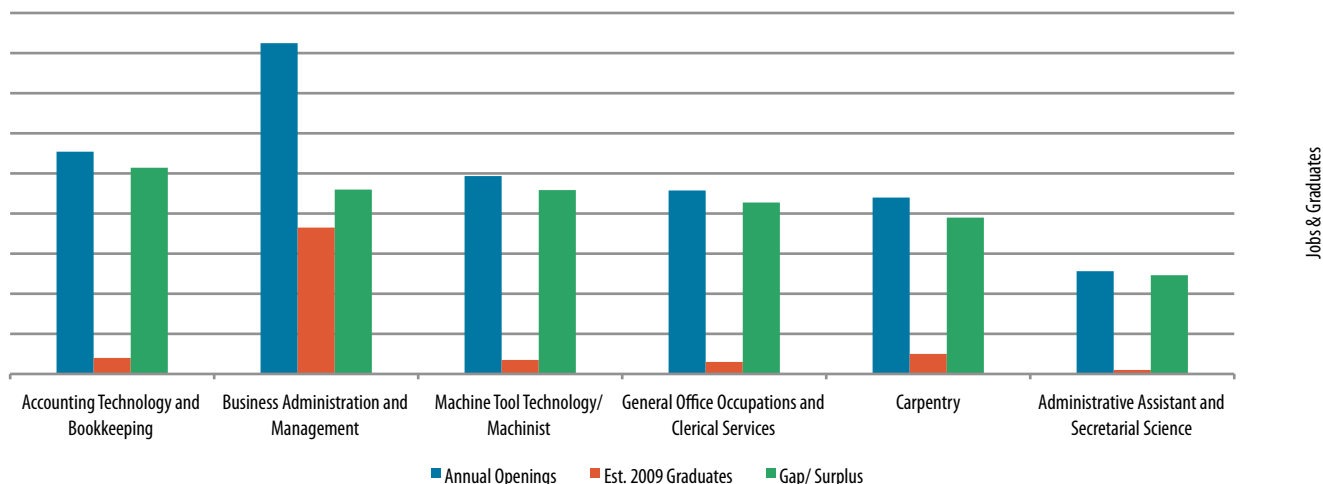


Table 2.1: Programs with Largest Gaps

CIP	CIP Title	Annual Openings	Est. 2009 Graduates	Gap/ Surplus	HHWG	Program Family
52.0302	Accounting Technology and Bookkeeping	55	4	51	•	Business
52.0201	Business Administration and Management	82	37	46	•	Business
48.0501	Machine Tool Technology/Machinist	49	4	46		Main. & Production
52.0408	General Office Occupations and Clerical Services	46	3	43		Business
46.0201	Carpentry	44	5	39	•	Main. & Production
52.0401	Administrative Assistant and Secretarial Science	26	1	25		Business

Coeur d'Alene) that offer certification or degrees, or to create its own programs altogether, or combine these two options.

The only other programs on this list are Machine Tool Technology and Carpentry. This is not surprising considering data explored in the economic overview section, which showed how construction and manufacturing are two of the most critical industry sectors in Bonner County. Construction could pick up again in North Idaho, at which time a Carpentry program would be advisable. In the meantime, a program which trains existing carpenters and construction workers in building retrofitting and green construction could be a good investment due to the focus on green construction in the American Recovery and Reinvestment Act. However, this type of program should not be considered unless it is well understood that many people in the community would utilize such a program. As a national average, about 53% of carpenters have a high school diploma as their highest level of education, indicating that although a two-year degree could be beneficial it is by no means necessary.* A program in Machine Tool Technology would seem to be a good fit in Bonner County, where there are roughly 100 manufacturing establishments. But the conditions for this program are slightly different due to the fact that providing education in Machine Tool Technology requires having large and expensive equipment. Therefore, it seems to be a better option for the Sandpoint Communiversity to rely on either North Idaho College or the Kootenai Technical Education Campus in Rathdrum to provide full-service education in this area. But given the importance to manufacturing to Bonner County, it would be prudent to offer some form of service or encouragement to local high school students and adults encouraging them to pursue these pathways.

* Employment Projections Program, U.S. Department of Labor, U.S. Bureau of Labor Statistics, Education and training measurements by detailed occupation, 2008

Unaddressed Occupational Demand

Thus far, EMSI has dealt primarily with the types of occupations for which regional postsecondary institutions are already providing some training. In this section, we will examine those occupations that are currently not affiliated with any postsecondary training programs.

Undersupply in the workforce could lead to some desirable effects for those who are currently trained for occupations that are undersupplied. These benefits include less competition for job openings and the potential for greater wage increases. However, this is not an advantageous condition for the labor market in general since it could put pressure on firms in the region to search out and possibly even recruit trained workers from outside of the region. In some cases, this extra expense could lead businesses that are critical to the local economy to move to areas where labor is easy to find. From a macro-economic perspective, it is prudent for regional stakeholders and educational institutions to find a way to plug these gaps.

This analysis will highlight the largest gaps, or fields, where the region's training programs are not addressing the demands of the labor market. The occupations in Tables ___ - ___ are divided into

groups according to the average educational level required for each occupation. EMSI has assigned an educational level to each occupation according to the proportion of individuals who work in each occupation and their highest level of education. This procedure is explained in more detail in Appendix B under the heading "Methodology Details." These six categories have been condensed into four smaller categories—no formal training, two to four years of training, four years of training, and four or more years of training—in the following tables.*

Though the state's four-year colleges are intended primarily to train workers in higher-level degree programs, we believe that it is still helpful to see the breadth of demand across educational categories. Occupations in the no formal education and two years of education categories can still be trained for through shorter-term workforce training programs.

Unaddressed High-Wage/High-Growth Occupational Demand

In addressing the needs of unaffiliated occupations, EMSI naturally begins by focusing on high-wage/ high-growth occupations, which represent the most critical need for several reasons that are explained in the Methodology section.

The list of high-wage/high-growth occupations that are not being addressed by regional postsecondary institutions is short but informative. There does not appear to be adequate need for many of the standard community college programs in areas, such as business, healthcare, computers, engineering technicians, and so on. The few occupations that are most in need of attention are from industries such as construction, maintenance, and transportation. At no formal education level, first-line supervisors/managers of construction trades and extraction workers

* Please take note that within each of the educational level categories the occupations are ranked in descending order according to a ranking metric, which calculates both the median hourly earnings and the annual openings.

No Formal Training

SOC Code	Description	2009 Jobs	2014 Jobs	Change	% Change	MHE	Ed Level	Annual Openings
47-1011	First-line supervisors/managers of construction trades and extraction workers	266	329	64	24%	\$15.64	OJT	16

Two to Four Years of Training

SOC Code	Description	2009 Jobs	2014 Jobs	Change	% Change	MHE	Ed Level	Annual Openings
49-9051	Electrical power-line installers and repairers	63	76	13	20%	\$38.91	Assoc.	4
17-3029	Engineering technicians, except drafters, all other	84	108	24	29%	\$18.36	Assoc.	6
47-2111	Electricians	123	151	27	22%	\$14.59	Assoc.	9
41-3011	Advertising sales agents	33	43	11	32%	\$20.38	Assoc.	3
43-5071	Shipping, receiving, and traffic clerks	64	75	11	17%	\$14.65	Assoc.	4

is projected to have about 16 annual openings per year and offers \$15.60/hour on average. Training for this occupation could easily be integrated with an educational program designed for carpenters, as discussed in the previous section. However, when considering training for this occupation a similar caution should be considered. Only 39% of first-line supervisors/managers of construction trades and extraction workers have an educational level higher than a high school diploma, so the demand for these workers may or may not translate into demand for a postsecondary program that trains for this profession.

There are a number of promising options at the two to four years of education level. Occupations such as electrical power-line installers and electricians are intimately linked to the home construction industry, and should therefore be considered with caution for the same reason as other construction occupations.

No Formal Training

SOC	Title	2009 Jobs	2014 Jobs	Change	% Change	MHE	HW	HG	HWHG	Annual Openings
41-2031	Retail salespersons	769	886	117	15%	\$8.76		•		47
41-1011	First-line supervisors/managers of retail sales workers	496	563	67	14%	\$11.04				24
47-2061	Construction laborers	323	388	65	20%	\$12.54		•		15
47-2141	Painters, construction and maintenance	143	179	36	25%	\$12.64		•		10
39-9011	Child care workers	248	279	30	12%	\$8.01				13
37-3011	Landscaping and groundskeeping workers	209	243	34	16%	\$10.51		•		10
53-7062	Laborers and freight, stock, and material movers, hand	203	213	10	5%	\$11.00				9
35-2021	Food preparation workers	169	189	20	12%	\$8.69				10
53-3033	Truck drivers, light or delivery services	112	126	14	13%	\$13.33				5
35-3011	Bartenders	138	148	11	8%	\$9.36				7
47-2021	Brickmasons and blockmasons	23	29	6	26%	\$14.43	•			2
51-2092	Team assemblers	56	69	13	23%	\$11.05		•		4

Two Years of Training

SOC	Title	2009 Jobs	2014 Jobs	Change	% Change	MHE	HW	HG	HWHG	Annual Openings
11-9141	Property, real estate, and community association managers	320	424	104	32%	\$8.30		•		25
43-9061	Office clerks, general	379	442	63	17%	\$11.74		•		20
53-3032	Truck drivers, heavy and tractor-trailer	242	262	20	8%	\$15.38	•			8
25-9041	Teacher assistants	127	137	10	8%	\$17.42	•			4
31-1012	Nursing aides, orderlies, and attendants	168	199	32	19%	\$10.85		•		8
51-1011	First-line supervisors/managers of production and operating workers	81	92	12	15%	\$15.06	•			4
27-4021	Photographers	139	158	19	14%	\$11.43				7
41-3021	Insurance sales agents	65	84	19	29%	\$10.86		•		5
53-3033	Truck drivers, light or delivery services	112	126	14	13%	\$13.33				5
35-3011	Bartenders	138	148	11	8%	\$9.36				7
47-2021	Brickmasons and blockmasons	23	29	6	26%	\$14.43	•			2
51-2092	Team assemblers	56	69	13	23%	\$11.05		•		4

Engineering technicians, except drafters, all other; advertising sales agents; and shipping, receiving and traffic clerks all display strong growth and earnings potential and are involved in industries that have been growing steadily in Bonner County in recent years. Each of these occupations should be studied closely to determine if an educational program would benefit the business community and the individuals who undertake the program.

Other Unaddressed Occupational Demand

Though the high-wage/high-growth occupations show the most pressing demands of the labor force, there are many more occupational categories that are not being served in the state. These offer an intriguing amount of new growth and sustainable living

Two to Four Years of Training

SOC	Title	2009 Jobs	2014 Jobs	Change	% Change	MHE	HW	HG	HWHG	Annual Openings
11-9021	Construction managers	216	268	52	24%	\$11.30		•		14
13-2052	Personal financial advisors	95	134	39	41%	\$10.82		•		9
19-4093	Forest and conservation technicians	81	91	10	12%	\$15.01	•			5
13-2021	Appraisers and assessors of real estate	115	152	37	32%	\$8.22		•		10
41-3031	Securities, commodities, and financial services sales agents	66	91	25	37%	\$9.27		•		7

Four Years of Training

SOC	Title	2009 Jobs	2014 Jobs	Change	% Change	MHE	HW	HG	HWHG	Annual Openings
11-9199	Managers, all other	436	526	91	21%	\$10.32		•		27
41-1012	First-line supervisors/managers of non-retail sales workers	161	182	20	13%	\$14.55	•			6
27-2022	Coaches and scouts	72	82	10	14%	\$13.63				4

Four or More Years of Training

SOC	Title	2009 Jobs	2014 Jobs	Change	% Change	MHE	HW	HG	HWHG	Annual Openings
29-1069	Physicians and surgeons	84	95	11	14%	\$53.06	•			4
25-1099	Postsecondary teachers	94	107	13	14%	\$37.95	•			4

wages. These occupations are listed in the following table. The education level categories are the same as those listed in the previous set of tables for HWHG occupations. You will also notice in these tables that we have introduced additional columns for high-wage and high-growth classifications. If an occupation is above average in either or both of these categories, the cell is marked with a dot such as this “•”. If the occupation is both high-wage and high-growth, it received a checkmark symbol such as this “✓”. The formula for determining high-wage, high-growth status is the same as that used in the previous table. This formula is explained in detail in the Methodology section above.

The list of occupations outside of the HWHG occupations is significantly larger, indicating that there are many occupational categories that are just outside of the threshold for high-wage and/or high-growth that are nevertheless worthy of consideration. There are a few occupations on this list that may present legitimate opportunities as a new program offering. For instance, a Truck Driving program warrants consideration because two occupations—truck drivers, light or delivery services and truck drivers, heavy and tractor-trailer—pay more than \$13/hour and are estimated to have 13 annual openings in the Bonner County area. In addition to supporting the transportation industry, these jobs could also further support the export-based manufacturing industries that exist in Bonner County.

Since the Sandpoint Community is designed to meet the needs of all age groups, some consideration should be given to those occupations that could be available to citizens 60 years old

and above, many of whom are looking for part-time jobs that provide some supplementary income and allow them to provide a helping hand in their community. Occupations such as teachers assistants; child care workers; and nursing aides, orderlies, and attendants could offer some appeal to older people. This would be beneficial to the Sandpoint community as well because these occupations are chronically undersupplied in most areas and have very high turnover rates. Between these three occupations there are roughly 25 annual openings and wages of between \$8-\$17 per hour.

For younger people, there is the possibility of providing basic education in some of the fundamental skills that lead to employment in numerous occupations, and which provide the first step in a career pathway that leads to higher-skill, higher-paying jobs. For instance, there are numerous occupations that require some affinity for mathematics and accounting, including appraisers and assessors of real estate; securities, commodities, and financial services sales agents; and insurance sales agents, among others. Though earnings in these categories are below a long-term sustainable rate, they could provide the entry-level experience necessary to move into higher-paying occupations within the same industry.

Conclusion

The new Community in Sandpoint will have many opportunities to strengthen the regional workforce by expanding the

educational offerings in Bonner County. EMSI's analysis points toward a justifiable need for expansion of postsecondary services in this area, particularly in the fields of business, production, transportation, and technical programs. With some of these programs Communiversity stakeholders will have to determine whether students will be better off receiving a portion of their education in Sandpoint and completing their programs at another educational institution in the region, or to entirely complete their program in Sandpoint. With other opportunities, the Communiversity faces the decision of whether or not to develop new programs that are not currently being addressed in the Idaho Panhandle and would benefit the entire region.

Analysis of the labor demands in Bonner County requires special attention to the details of the regional economy. It is EMSI's intention that the data in this report serve as the first step in this analysis. The data in this report is informative for high-level analysis of general trends and possible outcomes, but the solution to addressing the "gaps" and "surpluses" outlined cannot be undertaken without careful consideration of the factors outside the scope of this report.

Appendix A: Program to Program Cross-references

When calculating the graduates by program, it was not enough to simply consider the graduates from programs with the same title and award level because each college has its own preferred CIP titles and program curricula, which in many cases are very similar to other CIP titles. For instance, in some cases, a Criminal Justice Program is titled “Criminal Justice/Safety Studies,” while another college will call the program “Criminal Justice/Police Science.” The two programs have different CIP codes, but for all practical purposes they are training individuals for the same types of occupations. Therefore, EMSI accounted for completers

in programs with the same CIP title and those with similar and related CIP titles. Table A.2 has a detailed catalogue of such program cross-references. Programs are listed in ascending order according to CIP code. The key in Table A.1 contains the full name and the associated abbreviation of each college name. *

Table A.1: Titles and Abbreviations of Colleges in Northern Idaho

College	Abbreviation
University of Idaho- Coeur d'Alene	UI CDA
University of Idaho- Sandpoint	UI Sand
North Idaho College	NIC
Lewis-Clark State College- Coeur d'Alene	LC CDA

* Please note that some private colleges, which do not have specific professional and or technical training, have been excluded from this list, including Boise Bible College, George Fox University-Boise Center, etc. Also note that rather than include the name of each Cosmetology and/or Barber's college they have been condensed into a single title and abbreviation.

Table A.2: Program to Program Cross-references

CIP	CIP Title	Award Level(s)	College	Avg. Grads
03.0104	Environmental Sciences	Bachelor's, Certificate	UI CDA	2
11.0202	Computer Programming, Specific Applications	Associate's, PSV	NIC	6
13.0401	Educational Leadership and Administration, General	Master's, Bachelor's	UI CDA	8
13.1001	Special Education and Teaching, General	Master's, Bachelor's	UI CDA	2
13.1101	Counselor Education/School Counseling and Guidance Services	Master's	UI CDA	6
13.1201	Adult and Continuing Education and Teaching	Master's, Bachelor's, PSV	Multiple	4
13.1201	Adult/Organizational Learning and Leadership - M.S., M.Ed.	Master's	UI CDA	2
131319	Professional-Technical and Technology Education	Master's, Bachelor's	UI CDA	2
13.1202	Elementary Education and Teaching	Doctoral, Bachelor's, Associate's	Multiple	24
13.0101	Education, General	Associate's	NIC	5
13.1202	Elementary Education and Teaching	Bachelor's	UI CDA	14
13.1202	Elementary Education and Teaching	Bachelor's	LC CDA	1
13.1202	Elementary Education and Teaching	Associate's	NIC	6
13.1205	Secondary Education and Teaching	Doctoral, Bachelor's, Associate's	Multiple	10
13.0101	Education, General	Doctoral	UI CDA	1
13.0101	Education, General	Associate's	NIC	5

Appendix B: Methodology

Scope and Limitations

In EMSI's experience creating Educational Gap Analyses for post-secondary educational organizations across the country, we have observed some common misapplications of the data. Sandpoint Community stakeholders should be aware of following cautions in order to avoid the same confusion and misapplications.

The recommendations for programs in this report are based exclusively on occupational demand within the state of Idaho. In reality, there are many additional factors that the Sandpoint Community stakeholders must consider outside of in-state occupational demand before making academic planning decisions. Additional factors that could make program expansion or introduction infeasible include the cost of introducing and maintaining a new academic program, the availability of teaching personnel, the potential advent of privately managed educational opportunities in the future, and the strength of the relationship between the state educational system and the businesses demanding trained workers, among many other factors. If one or more of these factors were to be misaligned, it might be unfavorable to create a new program.

As an example of a program that might look promising on paper but that would not function well in reality, imagine a large electronics manufacturing company that has a significant demand for specialized production workers, such as electronic engineering technicians. Rather than work with the state educational institutions, this company prefers to hire and train its own workers. In this case, there would be little need to develop an educational program to meet the needs of this employer. Though this example is from the manufacturing industry, similar conditions could exist for programs in many other industries, including computers and information, healthcare, and business.

On the other hand, there are some factors that could point to a greater need for the expansion or introduction of a program that may be missed or underemphasized with this methodology. For example, by focusing on occupational demand within the state

of Idaho, we are categorically discounting workers who receive training within Idaho and find work across state lines. Though EMSI recognizes this common pattern, we do not have a way to accurately account for out-migration, either geographically or according to program of study. Therefore, we make the assumption that every student is more likely to stay in Idaho than to leave the state, and for the sake of economic development, it would be preferable if the overwhelming majority of these students did remain in the state. Though some degree of out-migration is normal, if this pattern is excessive, it should be seen as a problem that is draining the state of the positive effects associated with higher education, which would help justify public funding of these programs. To account for the inherent uncertainty of these data, we assume that it is not necessary to give attention to any surpluses or gaps of 10 or fewer workers. In other words, if there are 10 more graduates per year required within the region, it can be assumed that regional employers are able to cope with this gap by recruiting workers from outside the region or by training the incumbent workforce; and if there are 10 too many graduates in the region, we assume that these students will either change careers or out-migrate to find employment.

There is another factor that could impact the accuracy of EMSI's demand estimates. Occupations where projections have been skewed by declining employment can be caused not by a lack of employer demand but rather by waning interest within the workforce. Common examples of such occupations include jobs for welders, electricians, and other high-skilled, blue-collar jobs. Workers with such skills are in very high demand among employers, but fewer and fewer young people are entering such professions. This can cause the projected demand for these workers to appear lower than it actually is. Unfortunately, there is no easy way to compensate for issues such as this, but it should be kept in mind when looking at programs that train for high-skill, middle-wage, blue-collar jobs.

A disconnect between apparent and projected demand can also occur in circumstances where a program teaches certain skills that are in high demand, though the precise occupation that is being trained for is not in demand. This occurs with a program like Machine Tool Technology, which trains workers to be skilled within an array of categories, such as machinery, production, and general maintenance that could transfer to many different occupations and industries. This condition is also present among some of the more academic four-year programs (e.g., Mathematics and Anthropology). Although there are specific professions associated with each of these programs, the proportion of undergraduates who major and work in these fields is very small. On the whole, employers tend to be pleased with the knowledge and skills that these individuals obtain while studying in these fields, which makes these workers employable in a wide array of settings. Again, there is no simple way to mitigate the anomalies

in these data, but this fact should be kept in mind when considering programs with lower-than-expected annual job openings.

There are some modifications that EMSI conducts on the raw data to make them amenable to analysis. For instance, EMSI consolidates degree programs offered by different schools in each region in several ways. First, we treat associate's degree programs and certificate-level programs with equal weight in this report. This does not suggest that degree and certification programs are of equal value in the workforce, but rather that there is rarely a difference in the occupational categories for which these programs are preparing workers. The difference between an associate's degree and a certificate is often seen in the pay scale rather than in the occupational definitions. Secondly, we group together programs from different schools which have the same or similar CIP classifications. Though the curriculum, style, and rigor of the programs may vary greatly from institution to institution, the occupational categories available to workers upon completion of the programs are the same.

The third way that we consolidate degree programs is by grouping together programs in similar fields of study. This is because we have found that these programs often serve very similar demands in the workforce. This should not be seen as an indication that EMSI assumes the curricula within related programs to be equivalent. This modification is made in order to reconcile the different levels of specificity in the occupational data system and the educational data system. Though the SOC code system is adequately specific for most of its purposes, it lacks the same level of specificity that exists in the CIP code system. There is so much diversity within each occupational title that any one occupation can be serviced by multiple program types. For instance, consider an electronic engineering technician (SOC 17-2023). These individuals can work in a multitude of industry settings including manufacturing, utilities, telecommunications, research, and so on. The knowledge and experience required for each of these settings are quite different. In this case, as in many others, the specificity of the collegiate program is much greater than with the labor market data, so EMSI consolidates the collegiate program data accordingly.

EMSI's projections are based on current economic activity, not on what "could happen" if educational offerings are increased in the near future. Economists have repeatedly found in independent studies that there is a strong correlation between education and economic development. However, there is no consensus regarding the direction in which the causation flows. It is safe to say that education and economic development share a two-way street; advancement in one usually results in some advancement in the other. Therefore, the only conclusion we can draw from these studies is that it is possible, but not a given, that the educational recommendations made by EMSI in this report could

further spur economic development beyond even the estimates of our own projections.

Further Methodological Details

High-Wage & High-Growth Classifications

In order to differentiate between occupations that are of common importance and those that are high-priority, we have created individual classifications for occupations that are high-wage (HW) and high-growth (HG) relative to other occupations within the region. These occupations are worthy of closer attention for several reasons. Most obviously, of course, they pay more and are found in high-growth industries. This provides an easily recognizable benefit to individuals who become successfully employed in these occupations. These occupations also are important for a more indirect reason—as these individuals earn higher-than-average wages, they also typically spend a higher-than-average amount on other local industries. A portion of these workers' paychecks is spent within the region on other industries, such as on personal services, retail, hospitality, entertainment, health-care, and professional services, which allows these other local industries to grow and beget further economic growth.

To determine which occupations classify as HW and HG, EMSI selected certain data thresholds that these occupations needed to meet or exceed. High-growth occupations were required to have projected growth of at least 10 new jobs over the next five years, as well as a percentage growth rate greater than or equal to the median regional growth rate over the next five years. High-wage occupations were required to have median wages greater than or equal to the median regional wage. For the state-level analysis, we made adjustments based on the fact that this occupational group contains a much larger pool of workers and a higher educational level than that of the regional groups. The adjustments included increasing the minimum threshold for new job growth from 10 to 50 new jobs, while keeping the percentage growth formula the same as that used in the regional analyses, and increasing the earnings threshold from the 50th to the 75th percentile. Throughout this report, occupations which classify as high-growth have a bullet point in the "HG" column; those that classify as high-wage have a bullet in the "HW" column, and those which are both high-growth and high-wage have a checkmark in the "HWHG" column.

Double-Counting

Please note that with both the supply and demand data in this report, there is the possibility for double-counting to occur. On the supply side, there are a few educational programs offered in the state of Idaho with titles general enough to line up with several specific program categories. For instance, the Health Information/Medical Records Administration/Administrator program

(51.0706) is included in the calculations for three specific program categories: (51.0705) Medical Office Management/Administration, (51.0706) Health Information/Medical Records Administration/Administrator, and (51.0716) Medical Administrative/Executive Assistant and Medical Secretary.

On the demand side, there are some SOC codes that show up under multiple program headings because the knowledge and skills inherent in these occupations are too diversified to fit cleanly into one educational category. In many cases, EMSI was able to draw a clear correlation between programs and occupations, but not every case is so easily solved. Those who utilize this report should be aware that the occupations that are associated with each program are those that individuals are most likely to pursue upon graduation, but these estimates are based on averages and by no means represent all of the possible college-to-work transitions that could or will occur.

Exclusion of Programs

EMSI was successfully able to produce a program-to-occupation mapping which accounts for most of the programs offered in the state, but some programs were excluded because a useful program-to-occupation mapping was impossible to produce. The programs which are easiest to categorize are those which focus on a particular field of study that offers a clear career path to students who complete the program. But in some cases, the strength of an educational program is the breadth of its curriculum, which is also what makes these programs so difficult to categorize. A bachelor's level program in Philosophy, for instance, normally offers a well-rounded education requiring knowledge from many different disciplines, but it does not offer a clear career track. There is another class of programs that are excluded, not because they do not offer a clear career track but because the graduates of these programs are not likely to enter the workforce for several more years; programs in this category include Pre-law, Pre-Medicine, etc.

Educational Levels

EMSI used data from the Bureau of Labor Statistics in 2007 that give the proportion of workers at each educational level who are employed in each SOC code occupation. We then merged several of the educational level categories in order to arrive at five basic categories: high school diploma or less; some college education but no degree;* two-year college degree; bachelor's degrees; post-bachelor's professional certifications; and graduate or doctoral degrees. EMSI then concluded that whichever category had the maximum percentage of workers should determine the average educational level for that occupation. Some occupations, such as the occupation of mechanical drafters, had a

high proportion of workers in several categories. In cases where the average educational level appear to be on the cusp of two categories, we assumed that workers with either level of education would be equally capable of entering the occupations. The main overlaps that we were concerned with in this report were between the two-year college degree and bachelor's degree levels, and the bachelor's and graduate degree levels. In the data tables below the tables titled "Two or Four Years of Education" and "Four or More Years of Education" contain occupations that fulfill these conditions.

Customized Occupation Data

EMSI made modifications to two SOC codes that are referred to throughout this report. The SOC codes 11-9041: Engineering Managers and 25-1099: Postsecondary Teachers were subdivided into smaller categories to provide a more precise estimate on the number of workers within each subdiscipline in that occupational group. For instance, the occupation of postsecondary teachers was divided into twelve smaller groups for each field of study at the postsecondary level such as Science, Languages & Literature, Education, and so on. The percentage growth and percentage of replacement jobs for the parent occupation were retained and applied to the new base year occupational data. Therefore, the parent categories are projected to grow at a constant rate, and all the affiliated daughter occupations are also projected to grow at the same rate. The division of workers according to subdiscipline for postsecondary teachers was determined based on the number of faculty in each educational program category at the University of Idaho, Boise State University, and North Idaho College, though with some modifications to push the number upward to account for the number of healthcare and business professors at the state's private colleges. For engineering managers, we utilized the number of workers with SOC definitions related to that subdiscipline as a part of the whole number of engineering and science workers. This allowed us to approximate the number of engineering managers that work in each field. The proportion of engineering managers was then allocated accordingly.

* This category also includes individuals who received a post-secondary vocational award.

Appendix C: About EMSI Data

EMSI uses many components in the creation of its labor market data, but some sources are relied on more heavily than others.

The following is a list of our most foundational data sources. From federal data sources, we utilize the Quarterly Census of Employment and Wages (QCEW), Non-Employer Statistics (NES), County Business Patterns (CBP), Regional Economic Information System (REIS), the Bureau of Labor Statistics' Occupational Employment Statistics (OES), and Current Employment Statistics (CES). In addition, we utilize industry projections from each state's statistical agencies.

Using a proprietary algorithm, EMSI provides solidly-grounded estimates for government-suppressed employment numbers, which are data points not disclosed by the government to maintain employer privacy. EMSI also adds in non-payroll employment, which is not captured by QCEW, using REIS and NES, after which it benchmarks its final industry data against REIS, our most accurate but low-detail data source. EMSI uses CES to move QCEW employment data forward into the most recent quarter, thus capturing recent economic changes. EMSI then harmonizes its industry and occupation data and creates regionalized staffing patterns for every industry using the OES program.

The following is a comprehensive account of EMSI's data sources.

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